

## ABSTRACT OF THE DISCLOSURE

A glial precursor cell population from mammalian central nervous system has been isolated. These A2B5<sup>+</sup> E-NCAM<sup>-</sup> glial-restricted precursor (GRP) cells are capable of differentiating into oligodendrocytes, A2B5<sup>+</sup> process-bearing astrocytes, and A2B5<sup>-</sup> fibroblast-like astrocytes, but not into neurons. GRP cells can be maintained by regeneration in culture. GRP cells differ from oligodendrocyte-type-2 astrocyte (O-2A) progenitor cells in growth factor requirements, morphology, and progeny. Methods of use of GRP cells are also disclosed.